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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/227,770	01/08/1999	SURESH NARAYANA CHARI	YO999-002	7725

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IBM CORPORATION  
INTELLECTUAL PROPERTY LAW DEPT  
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EXAMINER

JACKSON, JENISE E

ART UNIT PAPER NUMBER

2131

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/227,770

Applicant(s)

CHARI ET AL.

Examiner

Jenise E. Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 7, 9-13, 40 and 59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7, 9-13, 40, 59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 7, 9-13, 40, 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cashman(6,209,087) in view of Lincke(6,397,259).
3. As per claims 7, 40, Cashman discloses providing a secure communication between a client(108) and a server(107)(see fig. 1, sheet 1) employing an untrusted proxy(i.e. network device)(see col. 7, lines 48-65), employing the proxy between the client and the server to provide connection links between the client and the server(see col. 7, lines 48-65); embedding a secure coprocessor(100) for use as an agent of the client(108)/ or server(107)(see fig. 1, sheet 1, see col. 7, lines 48-65) which assures that the proxy cannot tamper with the functioning of the agent, and view unencrypted communication between the client and server(see col. 8, lines 1-18), and proxy receiving a specific encrypted communication(see col. 8, lines 1-35), the agent being a software program or hardware logic operating within the confines of the coprocessor(see col. 8, lines 24-26); the proxy receiving a specific communication request from the client; the coprocessor is located at the site of the proxy and acts as a converter between at least one protocol the client supports(see col. 7, lines 66-67, col. 8, lines 1-4, col. 8, lines 29-32), and at least one other protocol supported by the server, guarantees that an application embedded in the coprocessor performs to a degree of security proscribed by the client or server; the proxy forming an n-

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tuple(i.e. packets) for a specific communication(see col. 7, lines 55-58); the proxy forming an n-tuple for a specific communication; the proxy forwarding the n-tuple to the coprocessor; the coprocessor generating a response(see col. 7, lines 66-67, col. 8, lines 1-8), including a directive to the n-tuple; the coprocessor sending the response to the proxy and the proxy implementing a directive(see col. 7, lines 66-67, col. 8, lines 1-18); and employing the respective security protocols of the at least one protocol and the at least one other protocol(see col. 7, lines 55-58). Cashman does not disclose splicing a plurality of secure communication protocols of different protocol suites into the agent, wherein the step of splicing a plurality of secure communication protocols is a security protocol of a Wireless Application Protocol(WAP) to that of an Internet Protocol(IP) device. Lincke et al.(6,397,259) discloses splicing a plurality of secure communication protocols of different protocol suites into the agent, wherein the step of splicing a plurality of secure communication protocols is a security protocol of a Wireless Application Protocol(WAP) to that of an Internet Protocol(IP) device(see col. 9, lines 56-67, col. 10, lines 1-2, col. 11, lines 8-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Lincke's splicing a plurality of secure communication protocols of different protocol suites into the agent, wherein the step of splicing a plurality of secure communication protocols is a security protocol of a Wireless Application Protocol(WAP) to that of an Internet Protocol(IP) device(see col. 9, lines 56-67, col. 10, lines 1-2, col. 11, lines 8-25) with Cashman, because the proxy server communicates with the wireless network and converts to Internet protocols and content into a form that can be used by the wireless network(see col. 11, lines 8-17 of Lincke).

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4. Same Motivation applies above. As per claim 9, Cashman does not disclose wherein the Wireless Application protocol suite is used by a persuasive computing device; however, Lincke discloses Wireless Application protocol suite is used by a persuasive computing device(see col. 9, lines 56-67, col. 10, lines 1-2, col. 11, 8-25).

5. As per claim 10, Cashman discloses the agent performing at least one content adaptation function(see col. 8, lines 1-53).

6. As per claim 11, Cashman discloses wherein the step of performing includes maintaining communication privacy(see col. 7, lines 48-65).

7. As per claim 12, Cashman discloses maintaining a state of splicing process resulting from the step of splicing(see col. 7, lines 66-67, col. 8, lines 1-4, col. 8, lines 29-32).

8. As per claim 13, Cashman discloses wherein the step of maintaining includes employing a storage device external to the proxy, and using cryptographic means to encrypt the state(col. 8, lines 1-4, col. 8, lines 29-32).

9. As per claim 59, Cashman discloses wherein the splicing includes maintaining end to end security guarantees without a modification to a server involved in the communication(see col. 7, lines 66-67, col. 8, lines 1-4, col. 8, lines 29-32).

#### ***Response To Applicant***

10. The Applicant states that Cashman does not disclose that the proxy cannot tamper with the function of the coprocessor. The Examiner disagrees. Cashman discloses that the coprocessor is responsible for encrypting the packets, not the network device, the network device does not tamper with the coprocessor(see col. 8, lines 1-18). In Cashman the CPU instructs the

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coprocessor to encrypt and compress and packetize the data(see col. 8, lines 4-7). Once the data is compressed and encrypted in packet format, co-processor notifies CPU of this event(see col. 8, lines 1-9). **The data is already encrypted when it arrives at the network device(see col. 8, lines 13-15).** Thus, the proxy does not tamper with the function of the coprocessor, the coprocessor job is to encrypt and decrypt the packets, among providing other functions that is listed in column 8(see col. 8, lines 13-19, and also, lines 19-32 of column 8). Thus, this point is moot.

11. The Applicant states that Cashman describes a method, which uses a coprocessor to implement elements of the protocol translation process between client and server. Further, the Applicant states the coprocessor in their invention to enforce the trust model between the client and server. Further, the Applicant states that there is no end-to-end security. The Examiner disagrees (see pg. 2, previous rejection). Cashman discloses end-to-end security, because Cashman discloses encrypting and decrypting packets(see col. 8).

12. The Applicant states that there is no motivation to combine, Cashman with Lincke. The Examiner disagrees with the Applicant. . Lincke et al.(6,397,259) discloses splicing a plurality of secure communication protocols of different protocol suites into the agent, wherein the step of splicing a plurality of secure communication protocols is a security protocol of a Wireless Application Protocol(WAP) to that of an Internet Protocol(IP) device(see col. 9, lines 56-67, col. 10, lines 1-2, col. 11, lines 8-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to include Lincke's splicing a plurality of secure communication protocols of different protocol suites into the agent, wherein the step of splicing a plurality of secure communication protocols is a security protocol of a Wireless Application Protocol(WAP)

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to that of an Internet Protocol(IP) device(see col. 9, lines 56-67, col. 10, lines 1-2, col. 11, lines 8-25) with Cashman, because the proxy server communicates with the wireless network and converts to Internet protocols and content into a form that can be used by the wireless network(see col. 11, lines 8-17 of Lincke).

13. Lastly, the Applicant has stated on page 7, several limitations that Cashman nor Lincke disclosed, without providing citations as to how these limitations are not disclosed in Cashman nor Lincke. Thus, the Applicant's arguments are moot.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenise E. Jackson whose telephone number is (571) 272-3791. The examiner can normally be reached on M-Th (6:00 a.m. - 3:30 p.m.) alternate Friday's.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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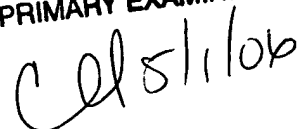
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A handwritten signature in black ink, appearing to be 'JR' or similar, written in a cursive style.

April 30, 2006

CHRISTOPHER REVAK  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to be 'C. Revak', followed by the date '5/1/06'.